Schedule B

Additional Information Requests Responses for Oroville Facilities Relicensing (FERC Project No. 2100)

1. In your Section 1.4 of Exhibit H, titled Coordination with Area Electrical Systems, you say that the existing power supply contracts expire December 31, 2004. To enable us to accurately describe your need for power, please update this section with information on the portfolio of generation resources starting January 1, 2005.

#### **DWR Response**

Our response to AIR No. 1 is provided in **Binder #3** and contains sales and other proprietary financial information. DWR believes that this information is exempt from public disclosure and should be afforded privileged and confidential treatment. See 5 U.S.C. § 552(b); 18 C.F.R. § 388.107(d). In accordance with the Commission's regulations, therefore, DWR has extracted all such sales and other proprietary financial information from the public copies of this submittal, included such information in **Binder #3** containing privileged information, and inserted this reference in the public copies where privileged information has been removed. See 18 C.F.R. § 388.112(b)(2). DWR respectfully requests that the Commission withhold all such privileged and confidential information from public disclosure. See *id.* § 388.112(b)(1).

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2. In Section 6.1.2.2 of your applicant prepared preliminary draft EA, you state that ancillary service benefits were added to arrive at a total annual net benefit for each alternative. However, you did not describe which ancillary benefits were included and the economic benefits associated with each. Therefore, for us to determine how you calculated the project's power benefits, please provide a more thorough breakdown of how the capacity value and each ancillary service value were developed.

#### **DWR Response**

Our response to AIR No. 2 is provided in **Binder #3** and contains sales and other proprietary financial information. DWR believes that this information is exempt from public disclosure and should be afforded privileged and confidential treatment. See 5 U.S.C. § 552(b); 18 C.F.R. § 388.107(d). In accordance with the Commission's regulations, therefore, DWR has extracted all such sales and other proprietary financial information from the public copies of this submittal, included such information in **Binder #3** containing privileged information, and inserted this reference in the public copies where privileged information has been removed. See 18 C.F.R. § 388.112(b)(2). DWR respectfully requests that the Commission withhold all such privileged and confidential information from public disclosure. See *id.* § 388.112(b)(1)...

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- 3. In Volume 1, Exhibit D of your license application, you provide O&M costs as one lump sum amount instead of itemizing them. For us to understand the existing O&M costs of the project and the projected O&M with your proposed environmental measures, we need you to provide each of the following costs:
  - 1. Plant operations O&M
  - 2. Administration and general expenses excluding insurance
  - Insurance
  - 4. Current environmental measure O&M
  - 5. Projected interim replacement costs over the next 30 years, including separate O&M and capital costs. (Please briefly describe each cost.)
  - 6. Station service amount and cost

#### **DWR Response**

#### 1. Plant Operations O&M

Table 1 outlining recent historical water and power related operations and maintenance costs for the Oroville Facilities follows this page. The table provides an itemization of certain O&M categories pursuant to your request.

Please note the operations and maintenance figures were revised from our application filing to reflect additional power and operations scheduling and management costs attributed to operation of the Oroville Facilities that were not initially included. As such, we have resubmitted revised Exhibits D and H as well as revised Chapters 6 and 7 to reflect the updated O&M and bond indebtedness costs.

The base operations and maintenance cost shown in Exhibit D and in Chapter 6 of the PDEA of the License Application was \$19,890,000 per year. That figure was based on State Water Project cost allocation data found in Bulletin 132-03 (referenced in our application). However, while the Bulletin 132 is intended to show how SWP costs are allocated to the 29 long-term water contractors, total P2100 O&M costs are captured under numerous cost categories lacking sufficient component detail in Bulletin 132. In addition, a significant component of SWP administrative and overhead costs that are a direct function of operating the Oroville Facilities was not included with the initial O&M figures included with our application. Our revised annual O&M cost estimate of \$30,958,000 is based on actual P2100 expenditures over a recent 5-year period; this figure has been updated to include the power and operations scheduling and management costs attributed to the Oroville Facilities portion of the SWP. Table 2 also shows a revised annual P2100 bond repayment amount (increased from \$10,016,000 to \$16,845,000, annually). The original figure quoted only included the Series A through Y Water Bonds. This levelized bond repayment figure is based on a residual of \$401,462,526 in outstanding revenue bond repayment obligations, which is the Oroville

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Facilities' share of the Burns-Porter General Obligation Bonds, the Small Hydro Bonds, the WSRB "Water System" Bonds, and the WSRB Surcharge. The bond obligations extend from 2005 through 2029.

#### 2. Administration and General Expenses

The administration costs and general expenses associated with the Oroville Facilities are included in the annual O&M costs shown in Table 1. We estimate that 10.9 percent of the \$26,431,000 base O&M amount is for administration and management overhead and 11.3 percent is for general expenses.

#### 3. Insurance

Insurance costs are not broken out separately in our cost accounting for Oroville Facilities. Generally, as a State agency, DWR is self-insured.

#### 4. Current Environmental Measures O&M

Table 2 itemizes the major environmental measures and programs currently ongoing at P2100, and their associated annual O&M costs.

#### 5. Projected Interim Replacement Costs

Table 3 shows an anticipated schedule for annual capital replacement and refurbishment costs for P2100 water and power facilities.

#### 6. Station Service Amount and Cost

Station service is provided at Table Mountain Substation as a result of the net generation from the Oroville Facilities. It is estimated that roughly 700 MWh of energy is consumed monthly to meet station service requirements. This energy consumption amounts to an annual expense of approximately \$300,000. Station service is not included as a line item in the O&M cost table but could theoretically be added to the total cost shown in Table 1. The table immediately below shows station service requirements for May and June of 2005.

Station Service Requirements at Oroville Facilities Plants in MWh						
Description May 2005 June 2005						
Hyatt Pumping-Generating Plant	596	490				
Thermalito Pumping-Generating Plant	182	184				
Thermalito Diversion Dam Powerplant	3.4	2.3				

# OROVILLE FACILITIES ANNUAL OPERATIONS AND MAINTENANCE COSTS

Table 1

Actual Costs, unless otherwise noted, incurred by DWR for Fiscal Year 2000 through Fiscal Year 2004

Average annual expenditures over these 5 years shown

Facility/Item or Program		Annual O&M
0 111 0 10 1		Cost
Oroville Dam and Reservoir		
O&M and the dam/other embankments, buildings, grounds, roads, and removal of Lake debris		\$724,000
O&M and repair of the Oroville Dam Spillway and Radial Gates		\$159,000
Dam safety fees	0	\$106,000
	Subtotal	\$989,000
Hyatt Pump/Generating Plant and Switchyard		
O&M of generation facilities including intake structure, pump/generating plant, and switchyard		\$6,445,000
O&M of generation facilities including intake structure, pump/generating plant, and switchyard  O&M of generation facilities specifically related to the pump/generating units		\$2,434,000
Odivi of generation facilities specifically related to the pump/generating units	Subtotal	\$8,879,000
	Subiolai	φο,οτ 9,000
Thermalito Diversion Dam, Reservoir and Power Plant		
O&M and repair of the Diversion Dam, radial gates, reservoir and surrounding lands, and roads		\$401,000
O&M of the Diversion Dam powerplant and generation unit		\$291.000
O&M of the Power Canal		\$2,000
Dam safety fees (includes Fish Barrier Dam)		\$7,000
	Subtotal	\$701,000
Thermalito Forebay Dam and Pump/Generating Plant		
O&M of the dam/other embankments, buildings, grounds, roads, trails, and Forebay		\$145,000
O&M of the Thermalito Pump/Generating plant and switchyard		\$4,809,000
O&M of generation facilities specifically related to the pump/generation units		\$690,000
Dam safety fees		\$3,000
	Subtotal	\$5,647,000
Thermalito Afterbay Dam, Reservoir and Feather River Outlet Structure		
O&M and repair of the dam embankment, buildings, grounds, roads, trails, and Afterbay		\$147,000
Dam safety fees		\$2,000
	Subtotal	\$149,000
Martin Martin Company Company Company of Martin Company		
Miscellaneous Oroville Facilities Operations and Maintenance		<b>A= 0=0 000</b>
O&M and repair for facilities P2100-wide that do not fit specific categories above		\$5,370,000
Selected administrative/management costs associated with P2100 including contracts and planning	0	\$94,000
	Subtotal	\$5,464,000
Dawar and Operations Cabaduling and Management		
Power and Operations Scheduling and Management  DWR Operations Center - power scheduling, sales, and power contract costs associated w/P2100		<u></u>
Annual hydropower license fee to FERC and CASWRCB Safe Drinking Water Act license oversight		\$3,550,000 \$180,000
Ongoing cost to reach settlement, continued operational and PME analysis, and implementation study	liad	
Ongoing cost to reach settlement, continued operational and PME analysis, and implementation stud	Subtotal	\$872,000 <b>\$4,602,00</b> 0
	Subtotal	<b>Φ4,002,000</b>
TOTAL POWER RELATED ANNUAL OPERATIONS AND MAINTENANCE	E COSTS	\$26,431,000
TOTAL ANNUAL O&M COSTS WITH ANTICIPATED CAPITAL REPLACEMENT/REFURBH	-	\$30,958,000
TOTAL ANNUAL ORIVI COSTS WITH ANTICIPATED CAPITAL REPLACEMENT/REFURDIN	OLIMITIA I	<b>JUU,</b> 8CE,UC¢

Source: DWR budgets and expenses for various programs within the Oroville Field Division, State Water Project Analysis Office, Project Operations Center, and Division of Operations and Maintenance for fiscal years 2000-2004. Note: The operational costs above include labor, administration, expenses, and overhead. Administration and management overhead costs are estimated to be 10.9% and general expenses are estimated to be 11.3% of the \$26.4 million base annual O&M.

<sup>&</sup>lt;sup>1</sup> These annual costs are based on an estimated \$3.5 million per year and a one-time capital cost of \$5 million for ongoing efforts to obtain a new FERC license from January 2005 through December 2006 amortized over 30 years.

<sup>&</sup>lt;sup>2</sup>Total annual O&M includes the \$4,527,000 estimated annual capital replacement and refurbishment from Table 3.

# ANNUAL COSTS ASSOCIATED WITH THE OROVILLE FACILITLIES Table 2

Actual Costs incurred by DWR for Fiscal Year 2000 through Fiscal Year 2004 Average annual expenditures over these 5 years shown

Environmental Protection, Mitigation, and Enhancement Measures <sup>1</sup>	Annual Expenditures	Capital Expenditures	Total Annual Expenditures
Feather River Fish Hatchery			
Operations funding via contract with DFG for steelhead and salmon production, tagging and transport	\$1,230,000	\$0	\$1,230,000
O&M and repair of buildings, grounds, roads, fish viewing platform and other visitor facilities	\$395,000		\$395,000
Subtotal	\$1,625,000	\$0	\$1,625,000
Feather River Fisheries and Habitat Management			
Monitoring and compliance of OCAP Biological Opinion measures relating to the Feather River	\$1,140,000	\$0	\$1,140,000
Additional Feather River salmonid surveys and spawning redd monitoring beyond OCAP BO	\$310,000	\$0	\$310,000
Subtotal	\$1,450,000	\$0	\$1,450,000
Lake Oroville Cold and Warm Water Fisheries Management Programs			
Warm water (bass) stocking and habitat enhancement structures and measures	\$82,000		\$82,000
Cold water salmonid stocking and associated disease control and study program	\$153,000	\$0	\$153,000
Subtotal	\$235,000	\$0	\$235,000
Thermalito Afterbay-Oroville Wildlife Area Habitat Management			
Maintain brood ponds, MBTA cover and forage habitat, ESA and vernal pool monitoring/protection	\$85,000	\$10,000	\$95,000
Vegetation surveys and management; Bald Eagle management plan activities	\$30,000	\$10,000	\$40,000
Water quality sampling, data collection, and analysis	\$50,000		\$50,000
Subtotal	\$115,000	\$20,000	\$135,000
Environmental PME Subtotal	\$3,425,000	\$20,000	\$3,445,000
P2100 ANNUAL FINANCING, AMORTIZED RELICENSING, AND ENVIRONMENTAL PME COSTS	\$2,195,000	\$20,000	\$2,215,000

<sup>&</sup>lt;sup>1</sup> These environmental PMEs are also identifed in Table 6.2-1 (No Action Alternative) of the January 2005 PDEA. Detailed line item O&M costs for the recreational PMEs can also be found in Table 6.2-1

#### ANTICIPATED MAJOR CAPITAL REPLACEMENT AND REFURBISHMENT FOR P2100 THROUGH 2050

#### Table 3

(Estimated Costs in 2004 Dollars)

					T.					Ti .		
	2005	2010	2015	2020	2025	2030	2035	2040	2045	2050		
Hyatt Unit Rewinds		9,000,000					9,000,000					
Hyatt Unit Field Pole Replacement	2,000,000		3,000,000						6,000,000			
Hyatt Runner Refurbishment	12,000,000						17,000,000					
Transformer Replacement				9,000,000								
TSV Refurbishment			4,000,000									
230 kV Circuit Breaker Refurbishment	500,000	2,000,000	500,000	500,000	2,000,000	500,000	500,000	2,000,000	500,000	500,000		
Hydraulic Conduit Repair		5,000,000		10,000,000								
Hyatt Intake and Spillway Repairs			7,000,000			8,000,000						
Thermalito Unit Rewinds			6,000,000					6,000,000				
Thermalito Unit Field Pole Replacement		4,000,000						4,000,000				
Thermalito Runner Replacement		3,000,000						3,000,000				
Thermalito Unit 2,3,4 Runner Replacement				15,000,000						3,000,000		
Transformer Replacement				2,000,000								
Control System Refurbishment	3,600,000						3,600,000					
Civil Works Capital Replacement and Repair					15,000,000					15,000,000		
Road Repair	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000		
	19,100,000	24,000,000	21,500,000	37,500,000	18,000,000	9,500,000	31,100,000	16,000,000	7,500,000			
All dollars in 2004 dollars										203,700,000		
Hyatt Unit rewinds involves replacing coppper					for labo				45 year anı	nual average =	= \$4,527,000	
Runner refurbishment involves replacing Fran												
Transformers are 127 MVA, subterrainean/wa												
Turbine shut-off valves (12-foot ball valves) will all need refurbishment due to leakage at seats. Ball trunion bearings are also worn and leaking. \$670,000 each for refurbishment												
230 kV circuit breakers are used to take Hyatt	Units off line	. Mfgr. recomr	mends refurbis	shment every	/ 2000 operat	ions, or roug	hly 3-5 years	s. Major over	all of all 14	230kV CBs is	needed every 15 years	S.
Thermalito Unit rewinds - 4 total at same cost as Hyatt.												
Thermalito Runners for Units 2-4 are relatively low head Francis and in good condition, but Unit 1 is a Caplan Unit and has cracked blades. Unit to be replaced around 2010												
Thermalito Transformers are 33 MVA outdoor units. About \$500K each to replace												
Control System (SCADA) slated for 2005 replacement with 30 year life.												
Civil Works expended repairs and capital replacement examples are 1990s radial gate remedial work, Hwy 162 Bidwell Bridge seismic retrofit estimated at \$20,000,000												
and potential concrete repairs to spillway (exis	sting crack at	10 feet in leng	gth near radial	gate bridge	footing)							

#### Schedule B

Additional Information Requests Responses for Oroville Facilities Relicensing (FERC Project No. 2100)

4. In your license application, you describe the 1969 agreement between DWR and the Joint Water District Control Board to supply water to agricultural users. For us to better understand the terms of the agreement and how it affects the operation of your project, please provide us with a copy.

#### DWR Response

The 1969 agreement between DWR and the Joint Water District Control Board follows this page. Please note the Joint Water District Control Board consists of four water districts. The four water districts are Richvale Irrigation District, Biggs-West Gridley Water District, and Sutter Extension Water District.

As an additional courtesy and for your information, we have also included the 1986 agreement between DWR and Western Canal Water District.

#### STATE OF CALIFORNIA THE RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES

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# AGREEMENT ON DIVERSION OF WATER FROM THE FEATHER RIVER

this AGREEMENT, made and entered into this 27 day of May, 1969, by and between the State of California, acting by and through the Department of Water Resources, hereinafter called "State"; Richvale Irrigation District, a public agency, Biggs-West Gridley Water District, a public agency, Butte Water District, a public agency, and Sutter Extension Water District, a public agency, hereinafter collectively referred to as "Districts";

WITNESSETH, That:

WHEREAS, the State is constructing or has constructed Oroville Dam-and Edward Hyatt Powerplant and the Thermalito Diversion Dam, Power Canal, Forebay, Powerplant, and Afterbay, which will modify the regimen of the Feather River, and

WHEREAS, the Districts divert water of the Feather River downstream from the City of Oroville pursuant to rights which are prior in time and superior in right to the water rights of State, and

WHEREAS, an Agreement as to the operation of Oroville

Dam and related facilities and diversion of water by the Districts
is desirable,

NOW, THEREFORE, it is agreed as follows:

# Definitions

When used in this agreement, the following terms have the meanings hereinafter set forth:

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- (a) "Afterbay Diversion Structures" means the two structures, gates and control facilities constructed by State in the Thermalito Afterbay pursuant to that certain agreement dated July 6, 1964, entered into by and between the parties hereto.
- (b) "Afterbay River Outlet" means the structure, gates and control facilities constructed by State in the Thermalito Afterbay for the release of water into the Feather River.
- (c) "Agricultural Use" means any use of water primarily in the production of plant crops or livestock for market, including any use incidental thereto for domestic or stockwatering purposes.
- (d) "Districts' Service Area" means the lands included within the boundaries shown on Exhibit A attached hereto and made a part hereof.
- (e) "Drought" occurs in any year in which the supply of State project water made available by the State for delivery to contractors under their Water Supply Contracts is less than the total of the annual entitlements of all such contractors for that year and in addition one of the following conditions exists:
- (1) The April 1 through July 31 unimpaired runoff to Lake Oroville for the current water year as forecasted by the Department of Water Resources (for inclusion in its Bulletin No. 120, "Water Conditions in California") on February 1 and modified by subsequent monthly reports thereafter as conditions and information warrant, is equal to or less than six hundred thousand (600,000) acre-feet; or
  - (2) The total accumulated actual deficiencies of unimpaired runoff to Lake Oroville below two million five

hundred (2,500,000) acre-feet in the immediately prior water year or series of successive prior water years each of which had runoff of less than two million five hundred thousand (2,500,000) acrefeet, together with the predicted deficiency, below two million five hundred thousand (2,500,000) acre-feet, for the current water year, exceed four hundred thousand (400,000) acre-feet.

- (f) "Flood Control Criteria" means the criteria governing maximum reservoir levels at Lake Oroville in order to provide flood control established pursuant to Article 1 of the contract between the Department and the United States Army Corps of Engineers dated March 8, 1962.
- (g) "Irrigation Season" means the period of April 1 through October 31 of each year.
- (h) "Joint Manager" means the person, and in his absence his assistant, employed by the Districts to act for them in giving diversion schedules and notices to State and receiving notices and reports to be given by the State to Districts, in accordance with this Agreement.
  - (i) "Limitation Period" means the period between April 1 and May 31 in all years in which the reduction of deliveries of the annual entitlement for water to be put to Agricultural Use by San Joaquin Water Supply Contractors as imposed by the State in accordance with Article 18(a) of the Water Supply Contracts does not exceed twenty-five percent (25%) or there is no such reduction and the period between March 1 and May 31 in all years in which said percentage reduction exceeds twenty-five percent (25%).

- (j) "Pacific" means Pacific Gas and Electric
  Company and includes its predecessors, successors and subsidiaries.
- (k) "San Joaquin Water Supply Contractors" means public agencies located in the San Joaquin Valley that are parties to Water Supply Contracts for delivery of water for Agricultural Use.
  - (1) "Sutter" means Sutter Extension Water District.
- (m) "Sunset" means the Sunset Pumping Plant of
  Sutter, and includes both the existing plant and additional pumping
  facilities that may be constructed by Sutter at or near the site
  of its present pumping plant.
- (n) "Tributaries of the Feather River" means all forks of the Feather River and streams flowing into the Feather River or any of its forks, but does not include streams, creeks or channels flowing into the Sacramento River.
- (o) "Water Supply Contracts' means the long-term Water Supply Contracts that the State has heretofore entered into with public agencies for supplying water made available by Lake Oroville and other facilities of State, such as the Water Supply Contract entered into with The Metropolitan Water District of Southern California, dated November 4, 1960.
- (p) "Water Year" means the period commencing with October 1 of one year and extending through September 30 of the next.
- (q) "Western Canal Points of Delivery" means the structures, gates and control facilities constructed by State in the Thermalito Afterbay for delivery of water to Pacific through Western Canal outlets 1 and 2.

#### 2. Water Diversions of the Districts

(a) Except as provided in Article 4 of this Agreement, Districts shall have the right to divert from the Feather River at the Afterbay Diversion Structures each Irrigation Season, five hundred sixty thousand (560,000) acre-feet of the water of the Feather River up to and including the year 1980 and five hundred fifty-five thousand (555,000) acre-feet each Irrigation Season thereafter: Provided, That in any year in which a temporary shortage due to Drought occurs, five hundred fifty-five thousand (555,000) acre-feet to and including 1980 and five hundred fifty thousand (550,000) acre-feet thereafter of the quantity of water Districts shall be entitled to divert under this Article 2(a) shall be reduced by a percentage not to exceed fifty percent (50%) in any one (1) year or a total of one hundred percent (100%) in any series of seven (7) consecutive years and further not to exceed the percentage for the reduction of deliveries of annual entitlements for water to be put to Agricultural Use in that year by San Joaquin Water Supply Contractors as imposed by the State in that year in accordance with Article 18(a) of the Water Supply Contracts: Provided further, That there shall be added to such reduced amount, and Districts shall be entitled to divert, an additional quantity of water equal to the amount of such reduction but not to exceed thirty-five thousand (35,000) acre-feet. The quantities of water Districts shall be entitled to divert under this Article 2(a) computed in accordance with the foregoing pro-Visions are as set forth in Columns 2 and 3 of Exhibit B attached hereto and made a part hereof.

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Diversions under the preceding provisions of this Article 2(a) shall not exceed two hundred fifty thousand (250,000) acre-feet during the Limitation Period of all years in which Drought does not occur and either or both of the following conditions exist:

(1) The storage in Lake Oroville at any time during the Limitation Period equals or exceeds the Flood Control Criteria.

(2) Any release is made from Lake Oroville during the Limitation Period to prevent Lake Oroville from equaling or exceeding the Flood Control Criteria.

During the Limitation Period of all other years in which Drought does not occur, diversions under the preceding provisions of this Article 2(a) shall not exceed two hundred thousand (200,000) acre-feet. During the Limitation Period of all years in which Drought occurs, diversions under the preceding provisions of this Article 2(a) shall not exceed the amount set forth in Column 4 of Exhibit B opposite the percentage of reduction imposed in that year pursuant to Article 18(a) of the Water Supply Contracts on the annual entitlements of water to be not t Supply Contracts on the annual entitlements of water to be put to Agricultural Use by San Joaquin Water Supply Contractors.

> The Department shall operate Lake Oroville during the period of April 1 through May 31 to maintain the maximum possible stored water consistent with the Flood Control Criteria and will make no releases prior to June 1 of any year except those provided for in the contract between the Department and Pacific, Southern California Edison Company, and San Diego Gas and Electric Company, dated November 29, 1967.

- (b) In addition to the water to be diverted under other provisions of this Article 2, Districts shall have the right to divert and use:
- (1) During the period November 1 of each year through March 31 of the next year, such amount of water as Districts determine that they require for reasonable beneficial use but subject to the limitation of diversions during the Limitation Period in years of over twenty-five percent (25%) reduction:

  Provided, That the State not be estopped from asserting in any judicial or quasi-judicial proceeding that all or any portion of such use is not a reasonable beneficial use.
- (2) Pursuant to existing agreements and rights between the Districts and Pacific and agreements that hereafter may be entered into, water to which Pacific is entitled under its contract with State, of which Exhibit C is a copy. State shall not change its said contract with Pacific or permit it to be changed, to diminish in any way the quantity of water Pacific will have available for sale to or use by Districts.
- other provisions of this Article 2, Districts, shall have the right to divert an additional five thousand (5,000) agre-feet during the Irrigation Season of each year for use as carriage water in the Districts' main canal, provided it is returned to the Feather River above Yuba City as operational spill during the same Irrigation Season. Districts shall measure this return flow and furnish the measurement records to State. State shall be entitled to inspect and test the measuring devices.

- (d) In addition to the water to be diverted under other provisions of this Article 2, Sutter shall have the right to divert each Irrigation Season at Sunset and use the following quantities of water:
- (1) Sixty-five thousand (65,000) acre-feet in each year in which either the unimpaired runoff to Lake Oroville for the period of April 1 to July 31 as forecasted by the Department of Water Resources (for inclusion in its Bulletin No. 120 "Water Conditions in California") on May 10 is equal to or exceeds one million five hundred thousand (1,500,000) acre-feet, or such predicted runoff when added to the previous years April 1 to July 31 runoff into Lake Oroville is equal to or exceeds three million (3,000,000) acre-feet.
- (2) Fifty thousand (50,000) acre-feet in all other years: Provided, That in any year in which a temporary shortage due to Drought occurs, said amount shall be reduced by a percentage not to exceed fifty percent (50%) in any one (1) year or a total of one hundred percent (100%) in any series of seven (7) consecutive years, and further not to exceed the percentage for the reduction of deliveries of annual entitlements for water to San Joaquin Water Supply Contractors as imposed by the State in that year in accordance with Article 18(a) of the Water Supply Contracts.

Diversions of water during the Limitation Period under the preceding provisions of this Article 2(d) shall not exceed thirty-five percent (35%) of the Irrigation Season entitlement of Article 2(d) water for that year unless releases are made from Lake Oroville during the Limitation Period to prevent Lake Oroville from equaling or exceeding the Flood Control Criteria or unless the storage in Lake Oroville equals or exceeds the Flood Control Criteria during the Limitation Period.

(e) Notwithstanding the inclusion of March in the Limitation Period, March diversions shall not be included as a part of the amount Districts are entitled to divert during the Irrigation Season.

Any water Districts obtain from Pacific, pursuant to the provisions of Article 2(b) during the Limitation Period shall be added to and increase the amount of water that may be diverted during the Limitation Period by the amount so obtained.

The State shall deliver any portion of the water to which Districts are entitled under this article to the Western Canal Points of Delivery for Pacific and shall deliver any water to which Pacific is entitled to the Districts' Afterbay Diversion Structures and the Afterbay River Outlet for Sutter in accordance with agreements between the Districts and Pacific.

On or before February 15 of each year, State shall furnish Districts a forecast as to whether Drought will occur during that year, as to whether reductions will be imposed, and the percentage of any such reductions, and as to the predicted unimpaired acre-foot runoff into Lake Oroville during the April 1 to July 31 period of that year. An unofficial forecast based on the most recent data available shall be sent to the Districts on or before April 1. An official forecast shall be furnished to  $\chi^{i\mathcal{O}}$  Districts on or before April 10. Such forecasts shall be periodically revised as additional data become available: Provided, That the percentage of reduction shall not exceed the

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 $ilde{p}$ percentage set forth in the April 10 forecast.

- (f) (1) During the term of this Agreement the Districts shall not divert any water from the Feather River or Tributaries of the Feather River except the water provided for in this Article 2. The Districts shall promptly dismiss Water Right Applications Nos. 13681, 13682, 14919, 14920, 15551, 15552, and 20308, on file with the State Water Resources Control Board and Application No. 2134 before the Federal Power Commission, and shall not file subsequent applications for a project on the Feather River or Tributaries of the Feather River that is the same or similar to the project proposed in said Application No. 2134.
- (2) In furtherance of the rights of Districts under the county of origin reservation in the assignment of the State's water rights applications in accordance with Water Code Section 10505, and in furtherance of the rights of Districts under the area of origin law (Water Code Sections 11460-11463), the Districts may obtain project water from the State under the applicable terms of the Standard Provisions for Water Supply Contract approved August 3, 1962, based or the State's prototype water supply contract with The Metropolitan Water District of Southern California, subject, however, to Article 45(h) of the State's Water Supply Contract with the County of Butte dated December 26, 1963. Notwithstanding other provisions of this paragraph, nothing herein contained shall be construed as a waiver by Districts of any rights they may have under the area of origin statutes.
- (g) In addition to the water or quantities of water to be diverted under other provisions of this Article 2, Districts may pump and use water obtained from wells located within

Districts' Service Area, and divert, store, and use water from streams and channels other than the Feather River and Tributaries of the Feather River and may divert and use water from drains.

- (h) State shall operate Oroville Dam and Lake Oroville and Thermalito Afterbay and related facilities and the Afterbay Diversion Structures to deliver the water provided for in Articles 2(a), 2(b), 2(c), 2(d), 2(e), and Article 3 in accordance with diversion schedules and notices to be given by the Joint Manager.
- In addition to the water which may be diverted under Article 2(d) of this Agreement, Sutter may divert at Sunset such portion of the water under Article 2(a) and Article 2(b)(2) as may be designated by the Joint Manager in the diversion schedules and notices to be given under Article 5, instead of diverting it through the Afterbay Diversion Structures. A five percent (5%) reduction shall be applied to any water so designated as diverted under Article 2(a) to determine the quantities thereof that may be diverted at Sunset; no reduction shall be applied to any water purchased by Sutter from Pacific pursuant to Article 2(b)(2).
- Until storage in Lake Oroville first reaches, or is predicted by State to reach, two million seven hundred thousand (2,700,000) acre-feet, the deliveries of water to the Districts from the Thermalito Afterbay shall be as provided in the letter agreement between Districts, Pacific, and State, dated March 8 1968. Article 2(d) of this Agreement shall not become effective until storage in Lake Oroville first reaches or is predicted by

State to reach two million seven hundred thousand (2,700,000) acrefeet. If storage in Lake Oroville reaches, or is predicted by State to reach, said storage during the period March 1 through October 31 in any year, the rights and obligations of the parties shall be governed by this Agreement for the entire Irrigation Season during that year without regard to the limitation of this article.

### 5. <u>Diversion Schedules and Notices</u>

- (a) On or before October 1 of each year, the Joint Manager shall furnish to State a delivery schedule setting forth the quantities of water to be delivered to the Districts weekly during the next year through the Afterbay Diversion Structures. Districts may revise this schedule on or about April 15, after State has furnished Districts with State's forecast of any deficiency.
- (b) The Joint Manager shall submit a weekly schedule not later than 1:00 p.m. on Wednesday preceding the week in which the schedule is to take effect. Such schedule shall set forth the quantities in total acre-feet per week and rates of flow in cubic feet per second to be delivered during the week to the Afterbay Diversion Structures, to Sunset pursuant to Article 2(d), and to the Afterbay River Outlet for delivery to Sutter pursuant to Article 3. For purposes of this section, the week shall be considered as beginning at 12:01 a.m. each Sunday and continuing until 12:01 a.m. the following Sunday.
- (c) The Joint Manager shall notify State no later than 4:00 p.m. each day of the rates of flow in cubic feet per second to be delivered to or for Districts during the twenty-four

- (24) hour period commencing at 8:00 a.m. on the following day.
- (d) Revisions in rates of flow not in excess of fifty (50) cubic feet per second shall be made by State within three (3) hours of any such revised request from Districts.

  Revisions in rates of flow of more than fifty (50) cubic feet per second, but less than two hundred (200) cubic feet per second, shall be made by State within twelve (12) hours of any such revised request from Districts. Revisions in rates of flow in excess of two hundred (200) cubic feet per second shall be made by State within twenty-four (24) hours of any such revised request from Districts.

Until such time as the Afterbay Diversion Structures are controlled from State's Control Center, requests for revision of rates of flow shall be made between the hours of 8:00 a.m. and 3:00 p.m. After the Afterbay Diversion Structures are controlled from State's Control Center, such requests may be made at any time.

Any request for revision may be made by telephone, or by such other means as may be agreed upon by the parties. State shall at all times make such changes as requested as soon as practicable, but in no event later than the time limits established herein.

Requests for revisions in the rate of flow shall be given to State's representatives located at State's Oroville headquarters. Initially, State's representatives shall be the Chief Operator, Monday through Friday, except state holidays, and at all other times, the operator located at State's Control Center.

(e) The water deemed delivered to Districts in any week under Articles 2(a), 2(b), 2(c), 2(d), 2(e), and Article 3

snall be the quantity of such water diverted by Districts during that week but subject to all of the following:

- (1) The amount deemed delivered shall not be less than the amount ordered for that week in the Joint Manager's weekly schedule as it may be reduced pursuant to his daily notices given under Article 5(c), however, that portion of said reductions that exceeds (1) in any one day 400 acre-feet multiplied by the number of days or fractional day in the week remaining at the time the reduction is ordered to take effect; or (2) in any one week 2500 acre-feet will be deemed delivered to the extent it cannot be conserved by State in Lake Oroville and Thermalito Afterbay but to the extent such excess can be conserved by State in said facilities it shall not be deemed delivered.
- (2) Notwithstanding the provisions of the next preceding paragraph, in any week during which State makes releases from Lake Oroville to prevent Lake Oroville from equaling or exceeding the Flood Control Criteria the water deemed delivered through the Afterbay Diversion Structures shall be the quantity of water delivered to the Districts during that week through such structures but not exceeding the amount ordered to be delivered through such structures by the Joint Manager pursuant to the weekly schedule as revised by his daily notices given under Article 5(c).
- (3) Water received by Districts in excess of the rate of flow specified in the Joint Manager's daily notice given under Article 5(c) will not be deemed delivered except that the combined flow of water through the Afterbay Diversion Structures, up to 2 percent or 20 cubic feet per second (whichever is greater) in excess of the rate of flow so specified will be deemed delivered.

(4) Water not received by Districts due to the failure of State to comply with the Joint Manager's weekly schedule as revised by his daily notices given under Article 5(c), will not be deemed delivered.

In the event of an emergency threatening the destruction of life or property, the Joint Manager may by telephone order an immediate reduction in the releases of water through the Afterbay Diversion Structures and such changes shall be made immediately by State, or in the event of its failure to do so, the Joint Manager may change the setting of the Afterbay Diversion Structures. In such event, the Districts will be deemed to have received the full flow set forth in the latest current effective diversion schedule or notice for a period not to exceed twelve (12) hours after the reduction is made, but only to the extent that it cannot be conserved by State.

Consistent with its-other requirements and contractual obligations, State will endeavor to conserve in the Oroville-Thermalito facilities, water scheduled but which Districts are unable to use during any week.

The quantity of water State is obligated to deliver to Districts during any week under Article 2(a), 2(b), 2(c), 2(d), 2(e) and Article 3 shall not exceed by more than 400 acre-feet in any day the daily quantity of water set forth in the schedule of the Joint Manager for that week: <u>Provided</u>, That the limitation shall not apply in any week during which the State makes releases from Lake Oroville to prevent Lake Oroville from equaling or exceeding the Flood Control Criteria.

To the extent that State can do so consistent with its other requirements and contractual obligations, the State will make available any additional quantities of water Districts may request in excess of the quantity set forth in the schedule of the Joint Manager for that week.

- (f) For the purpose of ascertaining if mutually agreeable changes can be made, the terms of this Article 5 shall be reviewed by the parties after the first Irrigation Season during which Afterbay Diversion Structures are controlled from State's Control Center, and thereafter on the request of any party but not more frequently than once every five years.
  - 6. Responsibility for Distribution of Water and Liability of State

Districts shall be responsible for the distribution of water diverted by them after it passes through the Afterbay Diversion Structures and the pumping facilities at Sunset.

Except as otherwise herein provided, neither the State nor any of its officers, agents, or employees shall be liable for the control, carriage, handling, use, disposal, or distribution of water diverted under the terms of this Agreement after it passes into Districts' canal system through the Afterbay Diversion Structures or the pumping facilities at Sunset.

State shall be solely responsible for maintaining a sufficient flow of water in the Feather River downstream from the Thermalito Diversion Dam to supply water diverted by others under rights superior to those of State or Districts.

This Agreement does not relieve State or its officers, agents or employees from liability to or from damages to Districts

or third parties arising out of failure of State at any time to comply with this Agreement or the diversion schedules or notices given by Joint Manager pursuant hereto or from injuries to crops or production of crops due to reduction in temperature of water available to Districts during any portion of any Irrigation Season or seasons as a result of water released from Lake Oroville being colder than water that would have been available in the Feather River for diversion by Districts if Oroville Dam had not been constructed. Nothing in this Agreement shall be construed as an admission by State that a reduction in the temperature of water available to Districts will in fact cause injury to crops or production of crops.

#### 7. Districts Not to Transfer Water

Subject to the provisions of Article 2(e) Districts shall not assign or sell the right to use any of the water to be provided for their use under this Agreement, nor deliver any such water to any person or entity located outside Districts' Service Area as shown on Exhibit A without the prior written consent of State. This provision is not violated by reason of the fact that some drain water will escape Districts' Service Area and be used outside such area by third parties or by reason of the fact that water is supplied to flush industrial wastes that may flow outside the service area.

# 8. Measurement of Diversions

State shall measure diversions into Districts' canal system through the Afterbay Diversion Structures and telephone to the Joint Manager preliminary records of such measurements prior to Wednesday of each week covering the preceding calendar week

and confirm them in writing mailed to the Joint Manager not later than the fifteenth day of each month. The records delivered shall show quantities and average flows each day. Districts shall have the right to inspect and test such measuring devices and obtain data as to water deliveries to Districts at their expense as frequently as they deem necessary. Districts may, at their expense, install equipment at and connected with the Afterbay Diversion Structures and the measuring devices downstream therefrom to transmit, electrically or electronically, information on water deliveries, flows, guage heights, and gate openings:

Provided, That the type of equipment and method of installation shall be subject to the approval of the State.

Sutter shall measure all water diverted at Sunset and through the Joint Manager shall telephone to State preliminary records of such measurements prior to Wednesday of each week covering the preceding calendar week and confirm them in writing mailed to State not later than the fifteenth day of each month. The records delivered shall show quantities and average flows each day. State shall have the right to inspect and test the measuring devices and ratings of the pumps at State's expense as frequently as State deems necessary.

# 9. Term of Agreement

This Agreement between State and Districts takes effect as of the date hereof and shall remain in full force and effect until terminated by the mutual consent of the parties or as provided for in Article 11(c): Provided, That this Agreement shall not be effective until Districts and Pacific have entered into an agreement which, during the period this Agreement and

Exhibit C are in full force and effect and not modified in any way or by any means unacceptable to Pacific or Districts, or any of Districts, has the effect of modifying that certain decree dated December 14, 1924, in Civil Action No. 2360 in the Superior Court of the State of California in and for the County of Sutter to permit the full performance of this Agreement.

#### 10. Prior Agreements

During the term of this Agreement the "Agreement Concerning the Operation of Antelope Valley Unit" dated January 21, 1964, between the State and the Districts shall not be effective insofar as it restricts the operation of the Antelope Valley Unit by the State.

To the extent that provisions in the agreement between the State and the Districts dated July 6, 1964, are necessarily inconsistent with this Agreement, they shall be superseded by this Agreement. However, State shall not be relieved of obligations under said July 6, 1964, agreement not necessarily inconsistent, including, without limiting the generality of the foregoing, its obligation to design, construct, maintain and operate the facilities therein referred to and any necessary fish screens and facilities in conjunction with the construction and use of the structures provided for under paragraph 1 of said agreement and to petition to include the real property referred to in paragraph 10 of said agreement in the Districts and to support the efforts of Districts to accomplish such inclusions.

# 11. Water Right Controversies

(a) Districts do not surrender, modify or terminate any of their rights to divert water or change the priority of

their rights, except for the change in point of diversion agreed to in their said July 6, 1964, agreement with the State and except as to the dismissal of certain applications for the storage and diversion of water on the Middle Fork of the Feather River and for generation of electricity. Districts will protect and defend their rights to divert water from the Feather River, including the protesting of applications to appropriate water that are adverse to the rights of Districts, the prosecution of such protests before the State Water Resources Control Board and other administrative agencies, and the defense of such water rights in courts: Provided, That the failure of Districts to protest an application or otherwise defend their water rights shall not be a default under this Agreement, unless Districts fail to protest an application or otherwise defend their water rights after having been specifically requested to do so by the State, as to the specific application or court proceeding, in time for protests or defenses to be made.

- (b) Water diverted by Districts under this Agreement shall be deemed diverted under Districts' water rights.
- (c) All parties agree to join in resisting any attack upon this Agreement or any of its provisions by judicial, administrative, or any other bodies. If this Agreement or any part thereof is decreed unenforceable or directly or indirectly modified in any respect other than by mutual agreement, the party whose interests are adversely affected shall have the option of terminating this Agreement, in which event all rights and privileges prevailing prior to the execution of this Agreement, the agreement between Districts and Pacific referred to in Article 9 hereof,

and the agreement between State and Pacific, a copy of which is attached as Exhibit C, shall be restored, and State shall operate the Afterbay Diversion Structures to supply the yield of the rights of Districts to the same extent as if Lake Oroville were not in existence and this Agreement and the agreements between State and Pacific had not been entered into.

Nothing in this Agreement shall be construed as an admission or consent by Districts that this Agreement or any part thereof is unenforceable or may be modified either directly or indirectly by judicial, administrative, legislative or other action except by mutual agreement of the parties.

### 12. Inspection of Records

The proper officers or agents of either party shall have full and free access at all reasonable times to the official records of the other party insofar as the same pertain to the matters and things provided for in this Agreement with the right at any time during office hours to make copies of such records.

# 13. Successors and Assigns Bound

This Agreement shall be binding upon and inure to the benefit of the successors and assigns of the respective parties to it.

# 14. Waivers

Any waiver at any time by any party to this Agreement of its rights with respect to a default or any other matter arising in connection with this Agreement shall not be deemed to be a waiver with respect to any subsequent default or matter.

#### 15. Notices

Except as otherwise herein expressly provided, all notices that are required either expressly or by implication to be given by one party to the other under this Agreement shall be signed for the State by its contracting officer, and for the Districts by their Joint Manager; shall be deemed to have been given at the time of delivery if delivered personally or twenty-four (24) hours after deposit in the mail if enclosed in a properly addressed envelope and deposited in a United States Post Office for delivery with postage prepaid; and unless and until formally notified otherwise shall be addressed to the State and the Districts at their addresses as shown on the signature page of this Agreement.

# 16. Opinions and Determinations

Where this Agreement calls for determinations, forecasts, or decisions to be made by the Department of Water Resources, or the State, they shall not be made capriciously, arbitrarily or unreasonably and Districts reserve the right to relief from and appropriate adjustment for any such arbitrary, capricious or unreasonable determination, forecast or decision.

IN WITNESS WHEREOF, this Agreement has been executed by the parties hereto as of the date first above written.

Approved as to legal form and sufficiency:

STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES

For

Chief Counsel
Department of Water Resources

Director P. O. Box 388

Sacramento, California

RICHVALE IRRIGATION DISTRICT

BUTTE WATER DISTRICT

By President Harris,

By find Horn

By Walter & Little

By Jaugh Heursbay
Secretary

BIGGS-WEST GRIDLEY WATER DISTRICT

SUTTER EXTENSION WATER DISTRICT

Fresident E. Hours

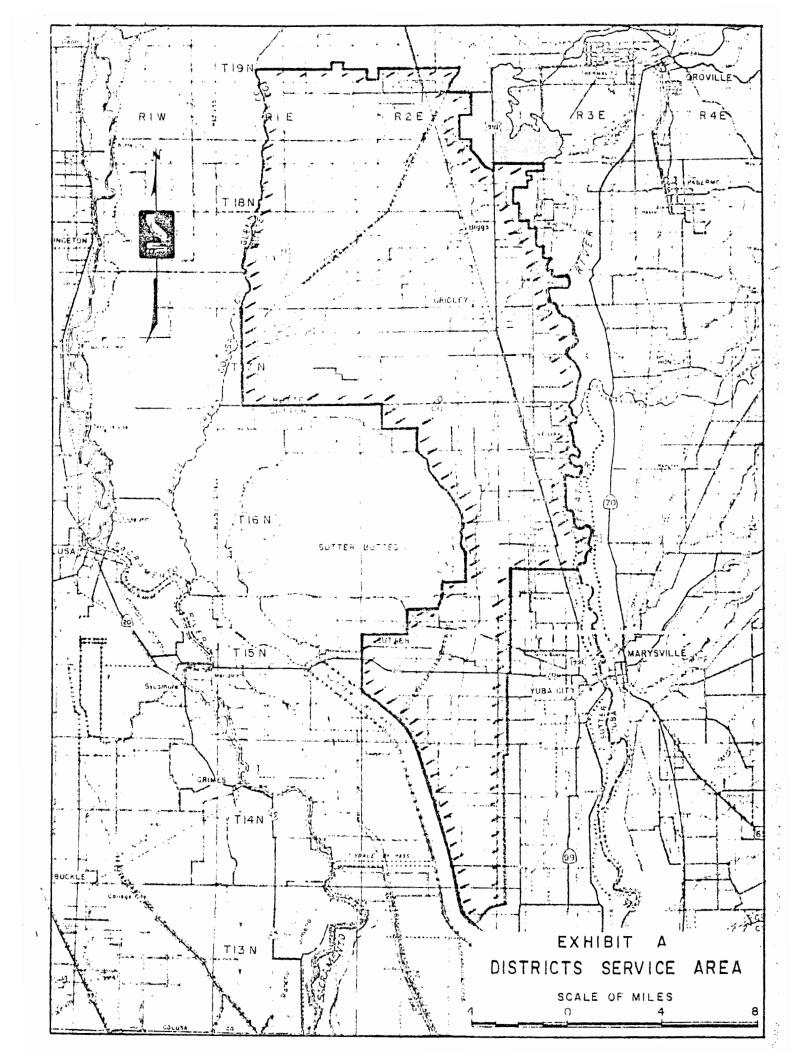
By W.C. Yew

By Aller Thomason President

Secretary

Address of Districts:

Joint Water Districts
P. O. Box 425
Gridley, California 95948



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Column 1	Column 2	Column 3	Column 4	Column 5
of Reduction	During Irrigation Scason in Years Prior _to 1981	During Irrigation Season after the Year 1980	During Limitation Period	Limitation Period
0123456789014345678901234567890123845678901238456789012384567890123845678901238456789012384567890123845678901	560,000 560,000 560,000 560,000 5600,000	55555555555555555555555555555555555555	200,000 197,400 194,400 191,600 188,800 188,000 184,300 182,600 177,500 177,800 179,500 179,300 167,300 167,300 163,200 163,200 165,900 155,400 155,400 155,600 141,920 142,920 143,920 144,920 145,920 146,920 147,920 147,920 148,920 149,920 140,92	Apr 1 to May 31  Apr 1 to May 31  Mar 1 to May 31

<u>' 'umn 1</u>	Column 2	Column 3	Column 4	Column 5
of Reduction	During Irrigation Season in Years Prior to 1981	During Irrigation Season after the Year 1980	During Limitation Period	Limitation Period
42 43 44 45 47 48 49	361,900 356,350 350,800 345,250 339,700 334,150 328,600 323,050	359,000 353,500 348,000 342,500 337,000 331,500 326,000 320,500	123,440 121,760 120,080 118,400 116,720 115,040 113,360	Mar 1 to May 31
50	317,500	315,000	110,000	Mar 1 to May 31

# STATE OF CALIFORNIA THE RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES

# AMENDMENT NO. 1 TO THE AGREEMENT ON DIVERSION OF WATER FROM THE FEATHER RIVER

#### RECITALS:

WHEREAS, the Department and the Districts entered into an agreement on the 27th day of May 1969, entitled "Agreement on Diversion of Water from the Feather River" for the operation of Oroville Dam and related facilities, and diversion of water by the Districts;

WHEREAS, the Districts desire to annex certain lands to the Districts' service area; and

WHEREAS, the Department is agreeable to the annexation; AGREEMENT:

It is mutually agreed the agreement be amended as follows: Exhibit A, is replaced with Exhibit A, Revised 1990.

IN WITNESS WHEREOF, the parties hereto, by their respective officers thereunto duly authorized, have executed this agreement on the date first above written.

APPROVED AS TO LEGAL FORM AND SUFFICIENCY

STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES

Acting Chief Counsel Department of Water Resources

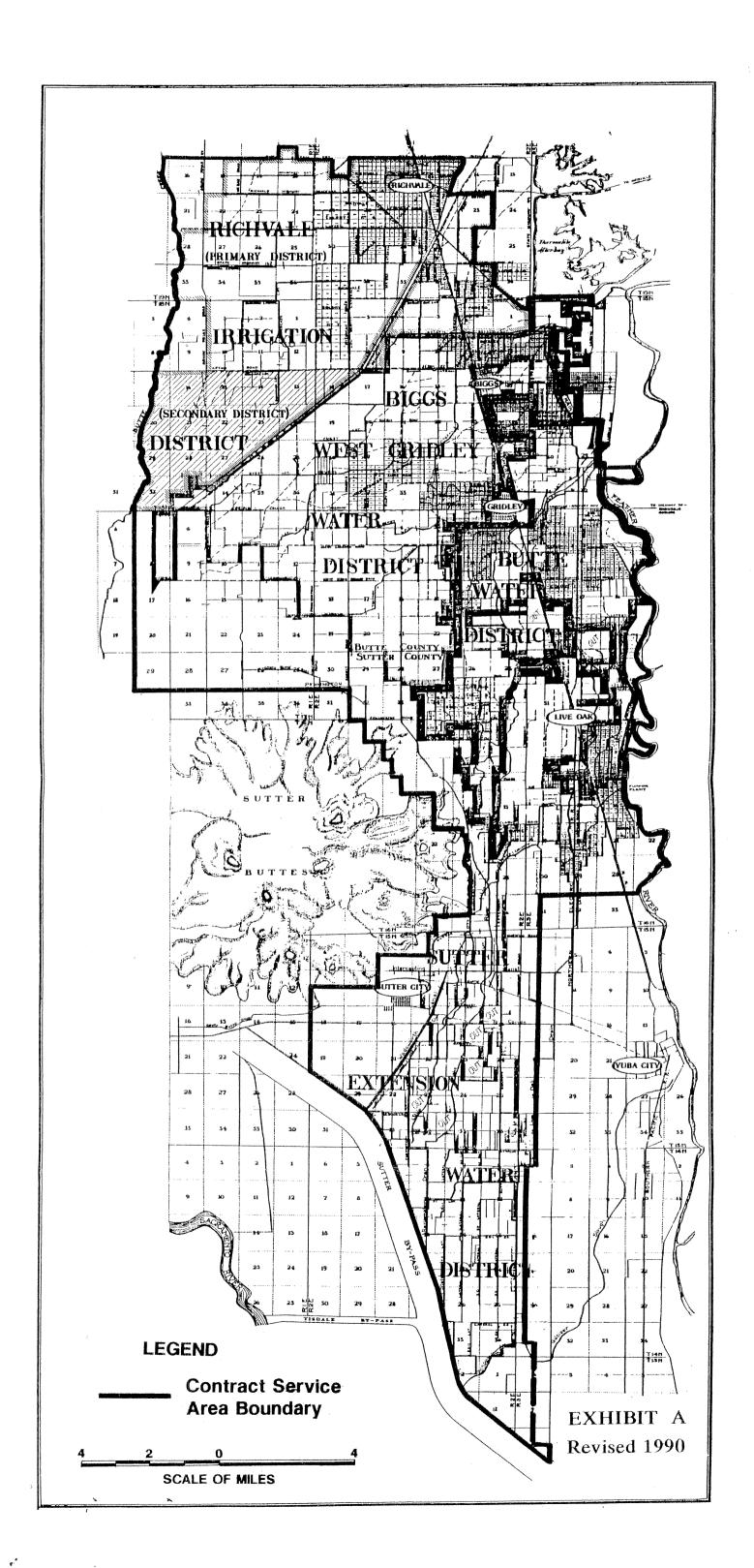
RICHVALE IRRIGATION DISTRICT

BUTTE WATER DISTRICT

BIGGS-WEST GRIDLEY WATER

DISTRICT

SUTTER EXTENSION WATER DISTRICT



## STATE OF CALIFORNIA THE RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES

## AGREEMENT ON DIVERSION OF WATER FROM THE FEATHER RIVER

THIS AGREEMENT, made and entered into the jīti day of the control of the state of california, 1985, by and between the STATE OF CALIFORNIA, acting by and through the Department of Water Resources, hereinafter called "State", PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, hereinafter called "Pacific", and WESTERN CANAL WATER DISTRICT, a political subdivision of the State of California, hereafter called "Western".

#### RECITALS:

WHEREAS, the State has constructed Oroville Dam and Edward Hyatt Power Plant and the Thermalito Diversion Dam, Power Canal, Forebay, Power Plant, and Afterbay, all of which are collectively referred to herein as the Oroville-Thermalito Project, as part of the State Water Project; and

WHEREAS, Pacific owns and operates a public utility hydroelectric system, hereafter referred to as the "Pacific System", and has entered into a contract with Western for the delivery or release of water to meet its obligations to Western from the Feather River downstream from the City of Oroville pursuant to water rights which are prior in time

and superior in right to the water rights of the State; and

WHEREAS, Western owns and operates a canal system for the diversion and delivery of water for agricultural purposes to an area located within the counties of Butte and Glenn, State of California, referred to in this Agreement as "Western System"; and

WHEREAS, the water supply for Western System is derived from the combined natural flow rights on the Feather River and Butte Creek, which have been assigned by Pacific to Western and are hereafter referred to in this Agreement as "natural flow rights", and the contractual right to releases by Pacific of Pacific's stored water from the upstream Pacific System, referred to in this Agreement as "stored water rights"; and

WHEREAS, pursuant to an Agreement dated May 27, 1969, between State and Pacific, an agreement was reached related to the operation of the Oroville-Thermalito Project in conjunction with Pacific's operations as owner of the facilities now owned by Western, which Agreement also defined the quantities of water to be delivered by State to Pacific, which Agreement must now be modified to reflect the operations of Western; and

WHEREAS, neither the State, Pacific, nor Western wish to materially alter, modify, amend, or otherwise affect,

operations of Pacific's, State's or Western's systems in any manner which will modify or change the operational criteria proviously existing under the prior Agreement of May 20th, 1967, between Pacific and State; and

WHEREAS, the parties wish to update certain provisions of the May 29, 1967 Agreement which are now obsolete and of no operational significance; and

WHEREAS, State and Western wish to update and clarify certain operating rules and criteria governing deliveries by State to Western.

NOW, THEREFORE, it is mutually agreed among the State, Pacific, and Western as follows:

## 1. Water Deliveries

during each irrigation season (March 1 through October 31) into Western Canal Outlet 1, Western Canal Outlet 2, the Richvale Canal Outlet, or the Sutter-Butte Canal Outlet from the Thermalito Afterbay, as Western may specify, (i) one hundred fifty thousand (150,000) acre feet under Western's natural flow rights, subject to reduction for deficiencies as provided in Article 2, and (ii) one hundred forty-five thousand (145,000) acre-feet under Pacific's stored water rights, which shall not be subject to any reduction for deficiencies.

(b) During the period November 1 to March 1 of the succeeding year, the State shall deliver such additional quantity as Western can beneficially use, including such additional quantity as is necessary for Western to meet its obligations under the July 7, 1922, contract of Western Canal Company, et al. with Clarence J. Berry and others and under the letter of August 4, 1937, from Western Canal Company entitled "In Re Agreement of July 7, 1922 Between Gun Clubs, Districts, and Western Canal Company" (copies of which are attached as Exhibits "A" and "B"), which obligations have been assigned by P.G.&E. to Western.

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- (c) Water delivered hereunder shall be diverted by State for Western at the Thermalito Diversion Dam and conducted through State's Thermalito facilities and delivered through the specified outlets from the Thermalito Afterbay. Subject to Article 6, the delivery of water pursuant to this Agreement shall constitute a substitution for all of the rights and claims of Western to divert water from the Feather River below Oroville Dam.
- (d) Western shall not claim any right to divert water from the Feather River in or downstream from Lake Oroville except water delivered pursuant to Articles 1(a) and 1(b) of this Agreement and shall not contract for the delivery of water of the Feather River in or downstream

from Lake Oroville to any person, district, municipality, or other agency, other than its direct customers served by the Western Canal System and the Joint Water Districts (Richvele Irrigation District, Biggs-West Gridley Water District, Butte Water District, and Sutter Extension Water District) through the Sutter-Butte Canal System.

(e) The State shall deliver any portion of the water to which Western is entitled under this Article into the Joint Water District outlets for the Joint Water Districts and shall deliver any water to which Joint Water Districts are entitled into Western Canal's Outlets in accordance with agreements entered into from time to time between Western and the Joint Water Districts.

## 2. Deficiencies

temporary shortage due to drought resulting in reduction of delivery of annual entitlements to water supply contractors of the State pursuant to Article 18(a) of the long-term water supply contracts that the State has heretofore executed, such as the water supply contract with The Metropolitan Water District of Southern California dated November 4, 1960, the quantity of water specified in Article 1(a) to be delivered by State to Western under Western's natural flow rights shall be reduced by an amount not to exceed the

percentages for the reduction in annual entitlements for water to be put to agricultural use by water supply contractors in the San Joaquin Valley as determined by the State in accordance with Article 18(a) of such contracts:

Provided, that the reduction in delivery to Western shall not exceed seventy-five thousand (75,000) acre feet in any one (1) year or a total of one hundred fifty thousand (150,000) acre feet in any series of seven (7) consecutive years.

- (b) As used in this Article, "drought" shall mean any year in which the supply of State project water made available by the State for delivery to State's water supply contractors is less than the total of the annual entitlements of all such contractors for that year, and in addition, either of the following conditions exists:
- (i) The forecasted April-July unimpaired runoff to Lake Oroville for the current water year (October 1 through September 30), as such forecast is made by the Department of Water Resources on February 1 and modified by subsequent monthly reports thereafter as conditions and information warrant, is equal to or less than six hundred thousand (600,000) acre feet; or
- (ii) The total accumulated actual deficiencies of unimpaired runoff to Lake Oroville below two million

five hundred thousand (2,500,000) acre feet in the immediately prior water year or series of consecutive prior water years each of which had runoff of less than two million five hundred thousand (2,500,000) acre feet, together with the predicted deficiency below two million five hundred thousand (2,500,000) acre feet for the current year, exceed four hundred thousand (400,000) acre feet.

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- (c) On or before February 15 of each year, the State shall furnish Western its forecast and the data required by this Article to support such forecast as to whether drought will occur during that year, as to whether reductions will be imposed, and the percentage of any such reduction. A forecast based on the most recent data available shall be furnished Western on or before April 10. Such forecasts shall be periodically revised as additional data become available: Provided, that the percentage of reduction, if any, shall not exceed the percentage set forth in the April 10 forecast.
- (d) For the purpose of the determinations in this Article, the predicted unimpaired runoff to Lake Oroville shall be that quantity as presently computed for inclusion in Department of Water Resources Bulletin No. 120, "Water Conditions in California", or in the event of discontinuance or alteration of such computation, by a method mutually

agreed upon.

## 3. Delivery Schedules

(a) On or before October 1, Western shall furnish to the State a delivery schedule setting forth the quantities of water to be delivered to Western each week during the following calendar year, and the quantity of water Western is entitled to receive under Article 1 which is to be delivered by State into Joint Water District.

Outlets during the following calendar year. Western may revise this schedule on or about April 15, after State has furnished Western with State's forecast of any deficiency reductions.

(b) Unless otherwise mutually agreed upon by the parties, State shall deliver water at the main Western Canal head gate (Western Canal Outlet Number 1) at a maximum rate of one thousand two hundred (1,200) cubic feet per second and at the second Western Canal outlet (Western Canal Outlet Number 2) from Thermalito Afterbay at a maximum rate of fifty (50) cubic feet per second. Deliveries requested by Western at other points specified in Article 1(a) shall be at a rate not in excess of the constructed capacity of the cutlets upon the effective date of this Agreement. The specific rates of flow at each point of delivery shall be determined in accordance with the Agreements between the

State and Pacific for operation of outlet facilities dated June 3, 1968 and December 24, 1974, or as said Agreements may be modified from time to time by mutual consent of the parties.

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(c) During the period March 1 through

October 31, Pacific shall release from its upstream storage
reservoirs a quantity of water, equal to the quantity delivered to Western under Article 1(a)(ii). Pacific shall
furnish State during the release period a monthly report of
reservoir storage and evaporation as set forth in Exhibit "C"
attached.

## 4. Responsibilities of the Parties

- (a) State shall operate Oroville Dam and Lake Oroville and Thermalito Afterbay and related facilities and the Afterbay diversion structures to deliver the water provided for in Article 1 in accordance with diversion schedules and notices to be given in accordance with Article 3 of this Agreement and the Agreement between the parties for the operation of outlet facilities from Thermalito Afterbay in effect at the time of deliveries.
- (b) State shall be solely responsible for maintaining a sufficient flow of water in the Feather River downstream of the Thermalito Diversion Dam to supply water diverted by others under rights superior to the State or

5/27/

Western.

(c) Nothing contained herein shall relieve State from, or impose on Western, any liability for the quality or temperature of water released by State from the Oroville-Thermalito Project or delivered to Western hereunder.

# 5. Effective Date of Agreement, Cancellation of May 27, 1969 Agreement

This Agreement shall be effective upon the date of execution hereof, and shall remain in force and effect until terminated on mutual consent of each of the parties hereto. The parties acknowledge that this Agreement does supersede and cancel the May 27, 1969 Agreement on Diversion of Water From the Feather River, between State and Pacific, and the parties are relieved from performance thereunder.

## 6. Water Rights

(a) Pacific and Western do not surrender, modify or terminate any of their rights to store or divert water, other than their points of diversion, or change the priority of their rights. Pacific and Western, as appropriate, will protect and defend their established rights to divert water from the Feather River through the Western Canal System, including the protesting of applications to

appropriate water that are adverse to the rights of Pacific and Western, the prosecution of such protests before the State Water Resources Control Board and other administrative agencies, and the defense of such water rights in the courts: Provided, that the failure of Western or Pacific to protest an application or otherwise defend its water rights shall not be a default under this Agreement, unless Western or Pacific fails to protest an application or otherwise defend its water rights defend its water rights after having been specifically requested to do so by the State in time for protests to be filed.

Western shall become a party to a general adjudication of rights to the use of water of the Sacramento River system or the Feather River System, this Agreement shall continue in effect until final judgment has been entered, at which time the final judgment in any such general adjudication shall determine the rights of the parties insofar as the quantities of water provided for herein are concerned. In all other respects, this Agreement shall continue in full force and effect. In any such adjudication neither State nor Pacific nor Western shall make or assert any claim inconsistent with the rights and obligations existing under this Agreement.

### 7. Effect on Other Agreements

Pacific and State have, by Agreements dated June 3, 1968 and December 24, 1979, established the respective rights and responsibilities of each party regarding the operation and maintenance of the outlet structures from Thermalito Afterbay and other facilities. Said Agreements, among other things, include a provision that State shall measure the quantities of water delivered on P.G.&E.'s demand from Thermalito Afterbay and shall furnish P.G.&E. with a record of all such water deliveries. Such Agreements, as they may be pertinent hereto, shall in all respects be assigned by Pacific to Western and the State's obligations thereunder to Pacific, and Pacific's obligations to the State, shall become mutual obligations of the State and Western, except as follows:

June 3, 1968, is modified by deletion of the first two sentences thereof. In lieu thereof, it is agreed that Western shall notify State no later than 3:00 p.m. if the delivery to Western is to be changed more than 50 cfs between the hours of 3:00 p.m. and 9:00 a.m. on the succeeding day; and

(ii) The obligation of State contained in Section-10(a)(ii), of the Agreement of June 3, 1968,

shall be deleted. Except as provided in this Article, and Article 3(c), the parties shall not be obligated for the purposes of this Agreement to malazain records or make determinations of natural flow or deliveries of water released from Pacific's upstream storage.

## 8. Inspection of Records

The proper officers or agents of each party shall have full and free access at all reasonable times to the official records of the other party insofar as the same pertain to the matters and things provided for in this Agreement with the right at any time during office hours to make copies of such records.

## 9. <u>Successors</u> and <u>Assigns</u> Bound

This Agreement shall be binding upon and inure to the benefit of the successors and assigns of the respective parties to it.

## 10. Waivers

Any waivers at any time by any party to this Agreement or its rights with respect to a default or any other matter arising in connection with this Agreement shall not be deemed to be a waiver with respect to any subsequent default or matter.

### ll. Notices

---- All notices that are required either expressly- ---

or by implication to be given by one party to the other under this Agreement shall be deemed to have been given at the time of delivery if delivered personally or forty-eight (48) hours after deposit in the mail if enclosed in a properly addressed envelope and deposited in a United States Post Office for delivery with postage prepaid. Unless and until formally notified otherwise, all notices shall be addressed to the State and Pacific and Western at their addresses as shown below.

IN WITNESS WHEREOF, this Agreement has been executed by the parties hereto as of the date first above written.

Approved as to legal form and sufficiency:

Chief Counsel

Départment of Water Resources

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
P. O. Box 368
Sacramento, CA 95802

(...

Director

PACIFIC GAS AND ELECTRIC COMPANY 77 Beale Street San Francisco, CA 94106

Attorney for Pacific Gas and Electric Company

Senior Vice-President

trest

Secretary

WESTERN CANAL WATER DISTRICT P. O. Box 176 Richvele, CA 95974

MINASIAN, MINASIAN, MINASIAN, SPRUANCE, BABER, MEITH & SOARES

By tack & Men

JEFFREYVA. MEITH, Attorney for Western Canal Water District By Jones Luncibing

President

Attest

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#### Attachment 3

Schedule B

Additional Information Requests Responses for Oroville Facilities Relicensing (FERC Project No. 2100)

5. Page 1-1 of your Fiscal Impacts report (R-19) indicates that "an electronic version of the spreadsheet model will be available once the study report process is completed." For us to fully understand your model assumptions and determine its validity, we need to review the spreadsheet model and sensitivity analysis. Therefore, please provide electronic copies of the economic-fiscal model and sensitivity analysis referred to in the report. In responding to this request, please include all of the specific input used to calculate the costs and revenues reported in R-19, so that we can complete our analysis of the model results.

#### **DWR Response**

The electronic version of the spreadsheet model and sensitivity analysis referenced in Study Plan Report R-19 is included on the enclosed CD.